

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

Claim 1 (currently amended): A snowmobile comprising:

a longitudinally extending chassis having a front portion and a rear portion, the chassis supporting a liquid-cooled engine proximate the front portion and an operator seat proximate the rear portion, the engine including coolant passages for carrying liquid coolant that absorbs heat generated by the engine during operation, the engine powering a drive track operatively connected to the chassis proximate the rear portion, the chassis front portion mounting a pair of steerable skis and supporting a body assembly, the body assembly containing the engine and a heat exchanger, the heat exchanger housed within the body assembly, connected in fluid communication with the engine coolant passages, and adapted to dissipate heat from the liquid coolant, the body assembly having airflow inlet openings and outlet apertures for allowing ambient air into and out of the body assembly and in contact with the heat exchanger, the body assembly formed by an upwardly open nosepan covered by a hood, the heat exchanger contained within the nosepan, the heat exchanger located forward of the engine.

Claim 2 (original): The snowmobile of claim 1, wherein the heat exchanger is contained completely within the nose pan.

Claims 3-4 (canceled)

Claim 5 (currently amended): The snowmobile of claim [[4]] 37, wherein the heat exchanger is contained within the nose pan.

Claim 6 (currently amended): A snowmobile comprising:

a longitudinally extending chassis having a front portion and a rear portion, the chassis supporting a liquid-cooled engine proximate the front portion and an operator seat proximate the rear portion, the engine including coolant passages for carrying liquid coolant that absorbs heat generated by the engine during operation, the engine powering a drive track operatively

connected to the chassis proximate the rear portion, the chassis front portion mounting a pair of steerable skis and supporting a body assembly, the body assembly containing the engine and a heat exchanger, the heat exchanger housed within the body assembly, connected in fluid communication with the engine coolant passages, and adapted to dissipate heat from the liquid coolant, the body assembly having airflow inlet openings and outlet apertures for allowing ambient air into and out of the body assembly and in contact with the heat exchanger, the body assembly formed by an upwardly open nosepan covered by a hood, the heat exchanger and the engine each defining a center of mass, the heat exchanger located forward of the engine, the heat exchanger center of mass below the engine center of mass.

Claim 7 (original): The snowmobile of claim 6, wherein the heat exchanger center of mass is below a belt line of the snowmobile.

Claim 8 (original): The snowmobile of claim 6, wherein the heat exchanger is positioned at least one inch below the engine center of mass.

Claim 9 (canceled)

Claim 10 (original): A snowmobile comprising:

a longitudinally extending chassis having a front portion and a rear portion, the chassis supporting a liquid-cooled engine proximate the front portion and an operator seat proximate the rear portion, the engine including coolant passages for carrying liquid coolant that absorbs heat generated by the engine during operation, the engine powering a drive track operatively connected to the chassis proximate the rear portion, the chassis front portion mounting a pair of steerable skis and supporting a body assembly, the body assembly containing the engine and a heat exchanger, the heat exchanger housed within the body assembly, connected in fluid communication with the engine coolant passages, and adapted to dissipate heat from the liquid coolant, the body assembly having airflow inlet openings and outlet apertures for allowing ambient air into and out of the body assembly and in contact with the heat exchanger, the body assembly formed by an upwardly open nosepan covered by a hood, the engine having intake and

exhaust pipe systems, the exhaust pipe system including an exhaust headpipe, the heat exchanger being below the exhaust headpipe, the heat exchanger being forward of the rear of the engine.

Claim 11 (original): The snowmobile of claim 10, wherein the heat exchanger is mounted below an elbow in the exhaust pipe system.

Claim 12 (original): The snowmobile of claim 10, the heat exchanger is directly under the elbow in the exhaust pipe system.

Claim 13 (currently amended): A snowmobile comprising:

a longitudinally extending chassis having a front portion and a rear portion, the chassis supporting a liquid-cooled engine proximate the front portion and an operator seat proximate the rear portion, the engine including coolant passages for carrying liquid coolant that absorbs heat generated by the engine during operation, the engine powering a drive track operatively connected to the chassis proximate the rear portion, the chassis front portion mounting a pair of steerable skis and supporting a body assembly, the body assembly containing the engine and a heat exchanger, the heat exchanger housed within the body assembly, connected in fluid communication with the engine coolant passages, and adapted to dissipate heat from the liquid coolant, the body assembly having airflow inlet openings and outlet apertures for allowing ambient air into and out of the body assembly and in contact with the heat exchanger, the body assembly formed by an upwardly open nosepan covered by a hood, [[the]] a first airflow outlet aperture being in the nosepan, whereby air flowing out the first outlet aperture during forward movement of the snowmobile is not directed upwardly rearward towards the operator, the air flowing out the first outlet aperture during forward movement of the snowmobile flowing rearward around the drive track under running boards on the snowmobile.

Claim 14 (currently amended): The snowmobile of claim 13, wherein the pair of steerable skis mount to the chassis front portion through respective suspension well openings in the nosepan, the first outlet aperture defined by one or more of the suspension well openings.

Claim 15 (canceled)

Claim 16 (currently amended): The snowmobile of claim 13, wherein the first outlet aperture is located proximate a bottom surface of the nosepan, whereby ambient air flowing out of the body assembly flows rearward around the drive track under running boards on the snowmobile.

Claim 17 (canceled)

Claim 18 (currently amended): The snowmobile of claim 13, wherein the radiator is located forward of the first outlet aperture.

Claim 19 (currently amended): The snowmobile of claim 13, wherein the first outlet aperture is at least one square inch.

Claim 20 (currently amended): A snowmobile comprising:

a longitudinally extending chassis having a front portion and a rear portion, the chassis supporting a liquid-cooled engine proximate the front portion and an operator seat proximate the rear portion, the engine including coolant passages for carrying liquid coolant that absorbs heat generated by the engine during operation, the engine powering a drive track operatively connected to the chassis proximate the rear portion, the chassis front portion mounting a pair of steerable skis and supporting a body assembly, the body assembly containing the engine and a heat exchanger, the heat exchanger housed within the body assembly, connected in fluid communication with the engine coolant passages, and adapted to dissipate heat from the liquid coolant, the body assembly having airflow inlet openings and outlet apertures for allowing ambient air into and out of the body assembly and in contact with the heat exchanger, the body assembly formed by an upwardly open nosepan covered by a hood, a first [[the]] airflow inlet opening being in the nosepan.

Claim 21 (currently amended): The snowmobile of claim 20, wherein the first inlet opening is located towards the front of the nosepan.

Claim 22 (currently amended): The snowmobile of claim 20, the first inlet opening is located forward of the heat exchanger.

Claim 23 (currently amended): A snowmobile comprising:

a longitudinally extending chassis having a front portion and a rear portion, the chassis supporting a liquid-cooled engine proximate the front portion and an operator seat proximate the rear portion, the engine including coolant passages for carrying liquid coolant that absorbs heat generated by the engine during operation, the engine powering a drive track operatively connected to the chassis proximate the rear portion, the chassis front portion mounting a pair of steerable skis and supporting a body assembly, the body assembly containing the engine and a heat exchanger, the heat exchanger housed within the body assembly, connected in fluid communication with the engine coolant passages, and adapted to dissipate heat from the liquid coolant, the body assembly having airflow inlet openings and outlet apertures for allowing ambient air into and out of the body assembly, one or more of the airflow inlet openings in contact with the heat exchanger, the body assembly including a first airflow inlet opening allowing ambient air into a first cavity within the body assembly, the first cavity containing the heat exchanger, the ambient air entering the first cavity through the first airflow inlet opening not contacting the engine, and the body assembly including a second airflow inlet opening allowing ambient air into one of the first cavity and a second cavity, the first airflow inlet opening being positioned lower on the body assembly than the second airflow inlet opening.

Claims 24-26 (canceled)

Claim 27 (currently amended): The snowmobile of claim ~~[[24]]~~ 23, wherein the second cavity contains the engine, whereby ambient air entering the second cavity through the second airflow inlet opening does not contact the heat exchanger.

Claim 28 (currently amended): The snowmobile of claim ~~[[24]]~~ 23, wherein the first and second cavities ~~have separate~~ respectively communicate fluidly with first and second airflow outlet apertures in the body assembly.

Claim 29 (currently amended): The snowmobile of claim [[24]] 23, further comprising a divider that separates the first cavity from the second cavity within the body assembly.

Claim 30 (original): The snowmobile of claim 29, wherein the divider directs the ambient air entering the first air inlet opening into the first cavity and directs the ambient air entering the second air inlet opening into one of the first and second cavities.

Claim 31 (original): The snowmobile of claim 29, wherein the divider is adjustable so as to change effective volumes of the first and second cavities.

Claim 32 (original): The snowmobile of claim 29, wherein the divider is adjustable about a hinge.

Claim 33 (currently amended): A recreational or utility vehicle, comprising:

a longitudinally extending chassis having a front portion and a rear portion, the chassis supporting a liquid-cooled engine, the engine including coolant passages for carrying liquid coolant that absorbs heat generated by the engine during operation, the chassis supporting a body assembly, the body assembly containing the engine and a heat exchanger, the heat exchanger housed within the body assembly, connected in fluid communication with the engine coolant passages, and adapted to dissipate heat from the liquid coolant, the body assembly including first and second airflow inlet openings that are exposed to airflow when the vehicle is in motion, the first airflow inlet opening allowing ambient air into a first cavity within the body assembly, the first cavity containing the heat exchanger, the ambient air entering the first cavity through the first airflow inlet opening not contacting the engine, the first cavity separated from a second cavity within the body assembly, the second cavity containing the engine, ambient air entering the second cavity not contacting the heat exchanger, the second airflow inlet opening allowing ambient air into one of the first and second cavities, and a divider that separates the first cavity from the second cavity within the body assembly, the divider being adjustable so as to change effective volumes of the first and second cavities.

Claim 34 (original): The vehicle of claim 33, wherein the body assembly is located proximate the front portion of the chassis and an operator seat proximate the rear portion of the chassis.

Claims 35-36 (canceled)

Claim 37 (new): A snowmobile comprising:

a longitudinally extending chassis having a front portion and a rear portion, the chassis supporting a liquid-cooled engine proximate the front portion and an operator seat proximate the rear portion, the engine including coolant passages for carrying liquid coolant that absorbs heat generated by the engine during operation, the engine powering a drive track operatively connected to the chassis proximate the rear portion, the chassis front portion mounting a pair of steerable skis and supporting a body assembly, the body assembly containing the engine and a heat exchanger, the heat exchanger housed within the body assembly, connected in fluid communication with the engine coolant passages, and adapted to dissipate heat from the liquid coolant, the body assembly having airflow inlet openings and outlet apertures for allowing ambient air into and out of the body assembly, one or more of the airflow inlet openings in contact with the heat exchanger, the body assembly including a first airflow inlet opening allowing ambient air into a first cavity within the body assembly, the first cavity containing the heat exchanger, the ambient air entering the first cavity through the first airflow inlet opening not contacting the engine, the body assembly including a second airflow inlet opening allowing ambient air into one of the first cavity and a second cavity, and the body assembly being formed by an upwardly open nosepan covered by a hood, the first airflow inlet opening being in the nosepan and the second airflow inlet opening being in the hood.